217/782-2113

"REVISED"
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

PPG Industries, Inc.
Attn: Plant Manager
Elwin - Mt. Zion Road
Mt. Zion, Illinois 62549

Application No.: 95090102 I.D. No.: 115810AAA
Applicant's Designation: Date Received: September 7, 1995
Operation of: Flat Glass Manufacturing Facility
Date Issued: November 7, 2002 Expiration Date[2]: November 7, 2007
Source Location: Elwin Road, Mt Zion, 62549, Macon County
Responsible Official: Phillip Burrus, Plant Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a flat glass manufacturing facility, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: May 27, 2003
Revision Date Issued: TO BE DETERMINED
Purpose of Revision: Significant Modification

This significant modification consisting of changes to Condition 7.3.6 (Emission Limitations) for Unit 03 with emission limitations now being based on units of pounds per hour, and changes to the quantities of the emission limitations for NO_x and SO_2. The following changes were also made to this Title 5 permit: Condition 7.1.12 – addition of formula for PM_{10} emissions, Condition 7.2.12 – addition of section "c" with NO_x, SO_2 and VOM factors, Condition 7.5.9 – changes to recordkeeping requirements to match pounds per hour limitations, Condition 7.5.12 – addition of new emission factors based on recent tests, Condition 7.6.12 – addition of updated emission factors, Condition 7.7.12 – change of emission factors to those based on lb/hp-hr, and the incorporation of Permit 02100029.

If you have any questions concerning this permit, please contact Sunil Suthar at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SIS:psj

cc: Illinois EPA, FOS, Region 3
USEPA

[1] This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 – federal PSD and 35 IAC Part 203 – Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

[2] Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

PPG Industries, Inc., Works #14
Elwin - Mt. Zion Road
Mt. Zion, Illinois 62549
217/864-2392

I.D. No.: 115810AAA
Standard Industrial Classification: 3211, Glass Manufacturing Facility

1.2 Owner/Parent Company

PPG Industries, Inc.
One PPG Place
Pittsburgh, Pennsylvania 15272

1.3 Operator

PPG Industries, Inc., Works #14
Elwin Road
Mt. Zion, Illinois 62549

Kathy Oman, Environmental Engineer
217/864-6288

1.4 General Source Description

PPG Industries, Inc. Illinois glass manufacturing plant is located in Macon County, Mt. Zion township, about 4 miles Southeast of Decatur. The Mt. Zion facility manufactures flat glass by a continuous float process.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
Btu	British thermal unit
°C	Degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
cfm	Cubic feet per meter
CFR	Code of Federal Regulations
cm	Centimeter
dscf	Dry standard cubic feet
dscm	Dry standard cubic meter
EPA	Environmental Protection Agency
ERMS	Emissions Reductions Market System
°F	Degrees Fahrenheit
ft	Feet
ft^3	Cubic feet
gal	Gallon
g	Grams
HAP	Hazardous Air Pollutant
HP	Horsepower
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
in	Inch
kg	Kilogram
kPa	Kilopascals
kW	Kilowatts
lb	Pound
m	Meter
Mft^3	Mega cubic feet
Mg	Megagram
min	Minute
mmBtu	Million British thermal units
$mmft^3$	Millimeter cubic feet
mmHg	Millimeter mercury
mo	Month
mph	Miles per hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards

PM	Particulate Matter
PM-10	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	Parts per million
PSD	Prevention of Significant Deterioration
psi	Pounds per square inch
RMP	Risk Management Plan
sec	Seconds
scf	Standard cubic feet
SO_2	Sulfur Dioxide
T	Tons
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Box Shop with Fabric Filters (ES-23)

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

SG100 Vacuum Pump Discharge Units (ES-40, 41, and 42)
SG100 Line Edge Deletion Dust Collector (ES-43)
400,000 Gallon Fuel Oil Tank (ES-324)
1,000,000 Gallon Fuel Oil Tank (ES-325)
Tin Bath Operations Including:
  #1 Bath Atmospheric Vents (ES-69, 70, and 71)
  #2 Bath Atmospheric Vents (ES-87 and 88)
Annealing Lehr Operations Including:
  #1 Lehr Exhausts (ES-74, 75, 76, 77, 78, 79, 80, and 81)
  #1 Lehr Exhaust Systems (ES-114, 115, 116, and 117)
  #2 Lehr Exhausts (ES-89, 90, 91, and 92)

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1118 kW (150 and 1500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
ES-1	Glass Melting Furnace #1 (Natural Gas-Fired with No. 2 Fuel Oil and Propane Backup, 211 mmBtu/hr)	January, 1980	Electrostatic Precipitator ES 1-EC-B and Lime Injection ES 1-EC-A
ES-3	Sand Unloading Conveyor Belt and Bucket Elevator	January, 1980	Baghouse ES 3-EC
ES-4	Sand Unloading Conveyor Belt and Bucket Elevator	January, 1980	Baghouse ES 4-EC
ES-5	Soda-ash Unloading Conveyor Belt and Bucket Elevator	1959	Baghouse ES 5-EC
ES-6	Mixed Batch Conveyor Belt	January, 1980	Baghouse ES 6-EC
ES-7	Dolomite Unloading Conveyor Belt and Bucket Elevator	1959	Baghouse ES 7-EC
ES-8	Spare Material Unloading Conveyor Belt and Bucket Elevator	1959	Baghouse ES 8-EC
ES-9	Gypsum Unloading Conveyor Belt and Bucket Elevator	1959	Baghouse ES 9-EC
ES-10	Mixed Batch Conveyor Belt	January, 1980	Baghouse ES 10-EC
ES-11	Cullet Return Conveyor Belt (CDC-1) Line 1	January, 1980	Baghouse ES 11-EC
ES-12	Cullet Return Conveyor Belt (CDC-2)	January, 1980	Baghouse ES 12-EC
ES-13	Cullet Return Conveyor Belt (CDC-4)	January, 1980	Baghouse ES 13-EC
ES-14	Cullet Return Conveyor Belt (CDC-3)	January, 1980	Baghouse ES 14-EC
ES-15	Cullet Return Conveyor Belt (CDC-5)	January, 1980	Baghouse ES 15-EC
ES-16	Cullet Return Conveyor Belt (CDC-6)	January, 1980	Baghouse ES 16-EC
ES-21	Cullet Return Conveyor Belt (BDC-11)	January, 1980	Baghouse ES 21-EC
ES-25	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	January, 1980	None
ES-26	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	January, 1980	None
ES-27	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	January, 1980	None
ES-28	Plant Boiler (Kawanee) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 11.7 mmBtu/hr)	January, 1980	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
ES-29	Sand Storage Silo #1	January, 1980	Fabric Filter ES 29-EC
ES-30	Sand Storage Silo #2	January, 1980	Fabric Filter ES 30-EC
ES-31	Soda Ash Storage Silo #3	January, 1980	Fabric Filter ES 31-EC
ES-32	Soda Ash Storage Silo #4	January, 1980	Fabric Filter ES 32-ES
ES-33	Dolomite Storage Silo #5	January, 1980	Fabric Filter ES 33-EC
ES-34	Spare Storage Silo	January, 1980	Fabric Filter ES 34-EC
ES-35	Gypsum Storage Silo #7	January, 1980	Fabric Filter ES 35-EC
ES-36	Limestone Storage Silo #7	January, 1980	Fabric Filter ES 36-EC
ES-45	Pyrolytic Coater (Top Coat Spray)	November, 1987	Condenser ES 45-EC-A, Cyclone ES 45-EC-B, Mist Eliminator ES 45-EC-C, Ammonia Injection ES 45-EC-D, and Baghouse ES 45-EC-e
ES-46	Pyrolytic Coater (Bottom/Gradient Coat Spray)	June, 1992	Oxidizer ES 46-EC-A, Ammonia Injection ES 46-EC-B, Baghouse ES 46-EC-C
ES-52	Hot End 1/Surface Treatment (Line 1 Surface Treatment)	January, 1987	None
ES-53	Cullet Return Conveyor Belt (CDC-8)	January, 1980	Baghouse ES 53-EC
ES-54	Cullet Return Conveyor Belt (CDC-13)	January, 1980	Baghouse ES 54-EC
ES-55	Cullet Return Conveyor Belt (CDC-10)	January, 1980	Baghouse ES 55-EC
ES-56	Line 2 Batch Delivery System (Cullet Transfer BDC-12)	January, 1980	Baghouse ES 56-EC
ES-57	Hot End 2/Surface Treatment (Line 2 Surface Treatment)	July, 1988	None
ES-58	Line 1 Emergency East Diesel Engine (1,150 kW)	January, 1980	None
ES-59	Line 1 Emergency West Diesel Engine (1,150 kW)	January, 1980	None
ES-61	Line 1 Glass Interleaving Application	July, 1989	Scrubber ES 61-EC
ES-62	Line 2 Glass Interleaving Application	July, 1989	Scrubber ES 62-EC

Emission Unit	Description	Date Constructed	Emission Control Equipment
ES-67	Glass Melting Furnace #2 (Natural Gas-Fired with No. 2 Fuel Oil and Propane Backup, 211 mmBtu/hr)	October, 1994	Electrostatic Precipitator ES 67-EC-B and Lime Injection ES 67-EC-A
ES-96	Line 2 Emergency East Diesel Engine (1,150 kW)	January, 1980	None
ES-97	Line 2 Emergency West Diesel Engine (1,150 kW)	January, 1980	None
ES-329	550 Gallon Gasoline Storage Tank with Submerged Loading Pipe	Unknown	None
ES-352	Mobile Standby Diesel Engine (1,860 bhp)	1997	None
Fugitive PM Emissions	Conveyor Transfer Points, Cullet Storage Piles, Cullet Shed Doors and Side Lines, Paved and Unpaved Roadways	---	None
Float Glass Line #1	750 Ton/Day Glass Furnace, Fired By Natural Gas	2002	Lime Injection and Electrostatic Precipitator

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM, PM_{10}, SO_2 and NO_X emissions.

5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Fugitive Particulate Matter Operating Program

N/A

5.2.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.7 Episode Action Plan

a. This source is required to have an episode action plan pursuant to 35 IAC 244.142. The Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	141.0
Sulfur Dioxide (SO^2)	392.3
Particulate Matter (PM)	363.7
Nitrogen Oxides (NO_x)	3,544.3
HAP, not included in VOM or PM	-----
Total	4,441.3

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions for each pollutant on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 General Records for Fugitive Emissions from Road Dust

a. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive PM from the traffic areas at the source (i.e., road dust) estimated based on the applicable emission factors and formulas specified by Condition 5.9.2, with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.

b. This record shall be updated upon construction of additional roadways or parking areas or other permanent change to the source, that alters the maximum aggregate emissions of PM.

5.6.3 Records of Fugitive Emissions from Cullet Storage Piles

a. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive PM from cullet storage piles at the source estimated based on the applicable emission factors and formulas specified by Condition 5.9.3, with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.

b. This record shall be updated upon addition of new cullent or raw material storage piles or other permanent change to the source, that alters the maximum aggregate emissions of PM.

5.6.4 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit. Applicable standard emission factors from AP-42 or other USEPA or Agency accepted sources shall be used.

5.9.2 General Procedures for Calculating Fugitive Emissions from Roadways

a. For the purpose of estimating fugitive PM emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.

b. For the purpose of estimating fugitive PM emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 are acceptable.

5.9.3 General Procedures for Calculating Fugitive Emissions from Cullet Storage Piles

For the purpose of estimating fugitive PM emissions from the cullet storage piles at the source, the emission factors and formulas in Sections 13.2.4 of the AP-42, Volume I, Supplement F, January, 1995 are acceptable.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Raw Material (Receiving, Storage, and Mixing)
Control: Baghouses

7.1.1 Description

The Raw Material process is comprised of unloading hoppers, storage silos, weighing and mixing equipment and distribution conveyors and bucket elevators. Raw materials, including sand, soda ash, dolomite, gypsum, and limestone, are received in bulk by rail and truck from suppliers, and unloaded into storage bins or silos. Raw materials are withdrawn from storage and conveyed into hopper scales for weighing. The proper amount of materials is then mechanically mixed and conveyed to a charging bin near the melting furnace. Fabric baghouses are used to control emissions.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-3	Sand Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 3-EC
ES-4	Sand Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 4-EC
ES-5	Soda-ash Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 5-EC
ES-6	Mixed Batch Conveyor Belt	Baghouse ES 6-EC
ES-7	Dolomite Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 7-EC
ES-8	Spare Material Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 8-EC
ES-9	Gypsum Unloading Conveyor Belt and Bucket Elevator	Baghouse ES 9-EC
ES-10	Mixed Batch Conveyor Belt	Baghouse ES 10-EC
ES-29	Sand Storage Silo #1	Fabric Filter ES 29-EC
ES-30	Sand Storage Silo #2	Fabric Filter ES 30-EC
ES-31	Soda Ash Storage Silo #3	Fabric Filter ES 31-EC
ES-32	Soda Ash Storage Silo #4	Fabric Filter ES 32-ES
ES-33	Dolomite Storage Silo #5	Fabric Filter ES 33-EC
ES-34	Spare Storage Silo	Fabric Filter ES 34-EC
ES-35	Gypsum Storage Silo #7	Fabric Filter ES 35-EC
ES-36	Limestone Storage Silo #7	Fabric Filter ES 36-EC

7.1.3 Applicability Provisions and Applicable Regulations

a. An "affected raw material process" for the purpose of these unit specific conditions is a raw material receiving, storage, and mixing process listed in Condition 7.1.2 and described in 7.1.1.

b. Each affected raw material process is subject to the emission limits identified in Condition 5.2.2.

c. The affected raw material process is subject to 35 IAC 212.321(a), which provides that:

> No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See also Attachment 2).

7.1.4 Non-Applicability of Regulations

This permit is issued based on the affected raw material processes not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected raw material process does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.1.5 Operational and Production Limits and Work Practices

The owner or operator shall follow good operating practices for the baghouses including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.1.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include these units.

7.1.7 Testing Requirements

N/A

7.1.8 Monitoring Requirements

N/A

7.1.9 Recordkeeping Requirements

In addition to records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected raw material receiving and storage process to demonstrate compliance with condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

a. Operating schedules (hr/mo and hr/yr); and

b. Operating records of all materials processed on a monthly and annual basis in tons.

c. Records of monthly and aggregate annual aggregate PM emissions for the affected raw material process shall be maintained, based on the Permittee's estimate of maximum emissions from the maximum hours of operation and the applicable emission factors, with supporting calculations.

d. Records addressing use of good operating practices for the baghouses:

i. Records for periodic inspection of the baghouses with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected raw material process with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

Continued operation of the affected raw material process with a defect in a baghouse that may result in emissions of particulate matter in excess of limits in Conditions 5.5.2 or 7.1.3(b) within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

a. Compliance with Conditions 5.5.2 and 7.1.3(b) is assumed by proper operation of the baghouses, as addressed by Conditions 7.1.5 and 7.1.9(d).

b. To determine compliance with Condition 5.5.1, PM_{10} emissions form the affected raw material process shall be calculated based on the following emission factors:

Process	Controlled or Uncontrolled Calculation	Emission Factor (lb/ton Material Processed)
Raw Material Unloading and Conveying[a]	Uncontrolled	0.0024
Batch House Dust Collectors[a] (batch)	Uncontrolled	0.0024
Batch House Dust Collectors[b] (cullet)	Uncontrolled	0.0002
Silo Vents[c]	Controlled	0.00004

Emission Factor References

[a] AP-42 8.19.1-1, 4th Edition (Batch Drop, Bulk Loading)

[b] AP-42 8.19.2-2, 4th Edition (Conveying, Tunnel Belt)

[c] AP-42 8.6-2, 4th Edition (Conveyor Transfer)

Uncontrolled Emission Factor Calculation:

PM_{10} (lb) = (Wt. Of Material Processed, ton) x (The Appropriate Emission Factor, lb/ton) x [1 - (Baghouse Efficiency* (%)/100)]

* As specified by manufacturers or vendors of the baghouses.

Controlled Emission Factor Calculation:

PM_{10} (lb) = (Wt. of Material Processed, ton) x (The Appropriate Emission Factor, lb/ton)

7.2 Unit 02: Cullet System (Handling, Storage, and Feeding)
Control: Baghouses

7.2.1 Description

The cullet system consists of outdoor and shed storage, aggregate handling, and eleven conveyor belts. The cullet is transferred to storage via conveyors from the wareroom at the end of the glass making process. Cullet from the storage is then fed, when desired, via conveyors to the raw materials (weighing and mixing) process for charging into one of the two furnaces. Baghouses are used with the conveyors to control emissions.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-11	Cullet Return Conveyor Belt (CDC-1) Line 1	Baghouse ES 11-EC
ES-12	Cullet Return Conveyor Belt (CDC-2)	Baghouse ES 12-EC
ES-13	Cullet Return Conveyor Belt (CDC-4)	Baghouse ES 13-EC
ES-14	Cullet Return Conveyor Belt (CDC-3)	Baghouse ES 14-EC
ES-15	Cullet Return Conveyor Belt (CDC-5)	Baghouse ES 15-EC
ES-16	Cullet Return Conveyor Belt (CDC-6)	Baghouse ES 16-EC
ES-21	Cullet Return Conveyor Belt (BDC-11)	Baghouse ES 21-EC
ES-53	Cullet Return Conveyor Belt (CDC-8)	Baghouse ES 53-EC
ES-54	Cullet Return Conveyor Belt (CDC-13)	Baghouse ES 54-EC
ES-55	Cullet Return Conveyor Belt (CDC-10)	Baghouse ES 55-EC
ES-56	Line 2 Batch Delivery System (Cullet Transfer BDC-12)	Baghouse ES 56-EC

7.2.3 Applicability Provisions and Applicable Regulations

a. An “affected cullet system” for the purpose of these unit specific conditions is a system as listed in Condition 7.2.2 and described in Condition 7.2.1.

b. Each affected cullet system is subject to the emission limits identified in Condition 5.2.2.

c. The affected cullet system is subject to 35 IAC 212.321(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See also Attachment 2).

7.2.4 Non-Applicability of Regulations

This permit is issued based on the affected cullet systems not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected cullet system does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.5 Operational and Production Limits and Work Practices

The owner or operator shall follow good operating practices for the baghouses including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.2.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.2.7 Testing Requirements

N/A

7.2.8 Monitoring Requirements

N/A

7.2.9 Recordkeeping Requirements

In addition to records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected cullet system process to demonstrate compliance with condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

a. Operating schedules (hr/mo and hr/yr);

b. Operating records of all cullet processed on a monthly and annual basis (tons);

c. Records of monthly and aggregate annual aggregate PM emissions for the affected cullet system process, based on the Permittee's estimate of maximum emissions from the maximum hours of operation and the applicable emission factors, with supporting calculations; and

d. Records addressing use of good operating practices for the baghouses:

i. Records for periodic inspection of the baghouses with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected cullet system with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

Continued operation of the affected cullet system with a defect in a baghouse that may result in emissions of particulate matter in excess of limits in Conditions 5.5.2 or 7.2.3(b) within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

a. Compliance with Conditions 5.5.2 and 7.2.3(b) is assumed by proper operation of the baghouses, as addressed by Conditions 7.2.5 and 7.2.9(d).

b. To determine compliance with Condition 5.5.1, PM_{10} emissions form the affected cullet system shall be calculated based on the following emission factors:

Controlled or Emission Factor

Process	Uncontrolled Calculation	(lb/ton Material Processed)
Cullet Dust Collectors	Uncontrolled	0.0002

These are the emission factors from Table 8.19.2-2, AP-42, Volume I, Fourth Edition (Conveying, Tunnel Belt).

PM_{10} (lb) = (Wt. Of Material Processed, ton) x (The Appropriate Emission Factor, lb/ton) x [1 - (Baghouse Efficiency* (%)/100)]

* As specified by manufacturers or vendors of the baghouses.

7.3 Unit 03: Glass Melting Furnace #1 and Refiner
Control: Electrostatic Precipitator and Lime Injection

7.3.1 Description

Glass Melting Furnace–Regenerative (Natural Gas fired, Side Port). The furnace has three purposes in the glass making process: to bring raw materials together to react; to hold the molten glass until it is free of bubbles and inclusions; and to condition the glass for forming. Raw materials and cullet are charged into the melting section, and then refined and temperature-conditioned to produce molten glass.

Particulate emissions are created by the vaporization and condensation of alkali sulfates. Gaseous emissions are generated by fuel (natural gas, propane, or fuel oil) combustion and raw material processing. Emissions from the furnace are controlled by good combustion practices (for NO_X and CO), hydrated lime injection (for SO_2), and use of an electrostatic precipitator (for PM and metals from colorants added).

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-1	Glass Melting Furnace #1 (Natural Gas-Fired with No. 2 Fuel Oil and Propane Backup, 211 mmBtu/hr)	Electrostatic Precipitator ES 1-EC-B and Lime Injection ES 1-EC-A

7.3.3 Applicability Provisions and Applicable Regulations

a. Glass Melting Furnace #1 as described in Conditions 7.3.1 and 7.3.2 is an "affected glass melting furnace" for the purpose of these unit-specific conditions.

b. The affected glass melting furnace is subject to the emission limits identified in Condition 5.2.2.

c. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from the affected glass melting furnace [35 IAC 215.301]. If no odor nuisance exists, this limitation shall apply only to photochemically reactive material.

d. The affected glass melting furnace #1 is subject to 35 IAC 212.321, which provides that:

> No person shall cause or allow the emission of particulate matter into the atmosphere in any

one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(a)].

e. The affected glass melting furnace is subject to the New Source Performance Standard (NSPS) for Glass Furnaces, 40 CFR 60 Subparts A and CC, because it was constructed after June 15, 1979. The Illinois EPA is administering the NSPS in Illinois under a delegation agreement. Pursuant to 40 CFR 60.292(a)(1), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator of a glass melting furnace subject to the provisions of 40 CFR 60 Subpart CC shall cause to be discharged into the atmosphere from any glass melting furnace fired exclusively with either a gaseous fuel or a liquid fuel, particulate matter at emission rates exceeding 0.225 g of particulate/kg of flat glass produced (those specified in Table CC-1, Column 2 and Column 3, respectively).

f. The Permittee shall not cause or allow the emission of SO_2 into the atmosphere from the affected glass melting furnace to exceed 2000 ppm [35 IAC 214.301].

7.3.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected glass melting furnace not being subject to 40 CFR 61 Subpart N-National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants, because it applies to glass melting furnaces that use commercial arsenic as a raw material.

7.3.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected glass melting furnace including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance

procedures, and inspection of the source [40 CFR 60.11(d)].

b. Pursuant to 40 CFR 60.292(e), during routine maintenance of add-on pollution controls, an owner or operator of a glass melting furnace subject to the provisions of Condition 7.3.3(e) [see also 40 CFR 60.292(a)] is exempt from the provisions of Condition 7.3.3(e) [see also 40 CFR 60.292(a)] if:

i. Routine maintenance in each calendar year does not exceed 6 days [40 CFR 60.292(e)(1)];

ii. Routine maintenance is conducted in a manner consistent with good air pollution control practices for minimizing emissions [40 CFR 60.292(e)(2)]; and

iii. A report is submitted to the Illinois EPA or USEPA 10 days before the start of the routine maintenance (if 10 days cannot be provided, the report must be submitted as soon as practicable) and the report contains an explanation of the schedule of the maintenance [40 CFR 60.292(e)(3)].

c. The affected glass melting furnace uses natural gas as its primary fuel. However, the affected furnace may be fueled by #2 fuel oil or by propane.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected glass melting furnace is subject to the following:

a. Actual emissions of nitrogen oxides from the affected glass melting furnace shall not exceed 13 pounds per ton of glass produced by the furnace. The actual emissions of sulfur dioxide shall not exceed 1.6 pounds per ton of glass produced by the furnace.

b. The above condition represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act.

c. The net increase in potential emissions of sulfur dioxide (taking into account control on emissions) from the affected glass melting furnace shall not exceed 250 tons per year. This overall rate shall include emissions attributed to the operation of the regenerative furnace and emissions that may arise from the combustion of the backup fuel oil.

d. The above limitations were established in Permit C7912026, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not cause or contribute to air pollution in violation of the National Ambient Air Quality Standard (NAAQS) for nitrogen oxides and sulfur dioxide pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.3.7 Testing Requirements

a. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in Conditions 7.3.7(a), 7.3.7(b), and 7.3.12(a) (see also 40 CFR 60.296), except as provided in 40 CFR 60.8(b) [40 CFR 60.296(c)].

b. Pursuant to 40 CFR 60.296(d), the owner or operator shall determine compliance with the particulate matter standards in Condition 7.3.3(e) (see also 40 CFR 60.292) and 40 CFR 60.293 as follows:

i. Method 5 shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). The probe and filter holder heating system may be set to provide a gas temperature no greater than 177 ± 14°C (350 ± 25°F), except under the conditions specified in 40 CFR 60.293(e) [40 CFR 60.296(d)(2)].

ii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity [40 CFR 60.296(d)(4)].

c. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:

i. Measurement of particulate matter emissions from stationary emission units subject to 35

IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].

iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

d. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.3.3(b).

e. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, emission measurements shall be conducted as follows, so as to demonstrate compliance with the emission limits in Condition 7.3.6:

i. Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C, or by measurement procedures established pursuant to 40 CFR 60.8(b) [35 IAC 214.101(a)].

ii. Measurement of nitrogen oxides shall be according to the phenol disulfonic acid method as published in 36 Fed. Reg. 15, 718, Method 7 [35 IAC 217.101].

7.3.8 Monitoring Requirements

None

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected glass melting furnace to demonstrate compliance with Conditions 5.5.1, 7.3.3, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:

   i. The date, place and time of sampling or measurements;

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or methods used;

   v. The results of such analyses; and

   vi. The operating conditions as existing at the time of sampling or measurement.

b. Records addressing use of good operating practices for the electrostatic precipitator and lime injection:

   i. Records for periodic inspection of the electrostatic precipitator and lime injection with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

c. Records of glass production for the affected glass melting furnace, (tons/day, tons/mo, and tons/yr);

d. Records of fuel consumption for the affected glass melting furnace, (tons/mo and tons/yr);

e. Records of monthly and annual aggregate PM, NO_x, SO_2, VOM, and CO emissions from the affected glass melting furnace process shall be maintained, based on glass production, fuel usage and the applicable emission factors, with supporting calculations; and

f. The Permittee shall maintain records of excess emissions during malfunctions and breakdowns. At a minimum, these records shall include:

i. Date and duration of malfunction or breakdown;

ii. A full and detailed explanation of the cause for such emissions;

iii. The contaminants emitted and an estimate of the quantity of emissions;

iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected glass melting furnace with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.3.7(c) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].

b. Emissions of NO_x, PM, and/or SO_2 from the affected glass melting furnace in excess of the limits specified in Condition 7.3.6 within 30 days of such an occurrence.

c. Continued operation of the affected glass melting furnace with a defect in the electrostatic precipitator or the lime injection that may result in emissions of particulate matter in excess of limits in Conditions 7.3.3(b), (d), or (e) within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected glass

melting furnace without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The affected glass melting furnace shall be fired with natural gas, fuel oil, or propane as the fuel.

7.3.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

a. Pursuant to 40 CFR 60.296(d), the owner or operator shall determine compliance with the particulate matter standards in Condition 7.3.3(e) (see also 40 CFR 60.292) and 40 CFR 60.293 as follows:

i. Pursuant to 40 CFR 60.296(d)(1), the emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (c_s Q_{sd} - A)/P$$

where:
E = emission rate of particulate matter, g/kg.

c_s = concentration of particulate matter, g/dsm.

Q_{sd} =volumetric flow rate, dscm/hr.

A = zero production rate correction

= 454 g/hr for pressed and blown (borosilicate) glass, wool fiberglass, and flat glass.

P = glass production rate, kg/hr.

ii. Direct measurement or material balance using good engineering practice shall be used to determine the amount of glass pulled during the performance test. The rate of glass produced is defined as the weight of glass pulled from the affected facility during the performance test divided by the number of hours taken to perform the performance test [40 CFR 60.296(d)(3)].

b. To determine compliance with Condition 5.5.1, PM emissions from the affected glass melting furnace shall be calculated based on the following:

PM (Ton) = (Glass Production, Ton) x (E, g/kg) x (1 kg/2.205 lb) x (2.205 x 10^{-3} lb/1 g) x (2,000 lb/Ton) x (1 Ton/2,000 lb)

c. To determine compliance with Conditions 5.5.1 and 7.3.6, emissions of NO_x, SO_2, and VOM shall be calculated based on representative emission factors obtained from source testing, with consideration and adjustment, as appropriate, for actual operation of the furnace and associated control device. The following emission factors will be used until additional information or testing is available that demonstrates these factors are not representative of current emissions:

Pollutant	Source Emission Factor (lb/ton)
NO_x	16.45
SO_2	0.67

These emission factors are based on the most recent source testing that was completed in September 2002. The emission factors may be updated when additional testing or emission estimates indicate that these emission factors are not representative of current emissions.

To determine compliance with the source and facility-wide emission limitations, emissions of VOM shall be calculated based on the following:

Pollutant	Glass Manufacturing Emission Factor (lb/ton)
VOM	0.1

This emission factor for VOM is based on glass manufacturing, melting furnace flat glass with electrostatic precipitator, Tables 11.15-2, AP-42, Volume I, Fifth Edition, Supplement D, March 1998.

Glass Manufacturing Emissions (lb) = (Glass Production, ton) x (The appropriate emission factor, lb/ton)

7.4 Unit 04: New Glass Melting Furnace #2 and Refiner
Control: Dry Scrubber, Electrostatic Precipitator and Lime Injection

7.4.1 Description

Glass Melting Furnace–Regenerative (Natural Gas fired, Side Port). This new furnace constructed in 1994 has three purposes in the glass making process: to bring raw materials together to react; to hold the molten glass until it is free of bubbles and inclusions; and to condition the glass for forming. Raw materials and cullet are charged into the melting section, and then refined and temperature-conditioned to produce molten glass.

Particulate emissions are created by the vaporization and condensation of alkali sulfates. Gaseous emissions are generated by fuel (natural gas, propane, or fuel oil) combustion and raw material processing. Emissions from the furnace are controlled by good combustion practices (for NO_x and CO), hydrated lime injection (for SO_2), and use of an electrostatic precipitator (for PM and metals from colorants added).

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-67	Glass Melting Furnace #2 (Natural Gas-Fired with No. 2 Fuel Oil and Propane Backup, 211 mmBtu/hr)	Electrostatic Precipitator ES 67-EC-B and Lime Injection ES 67-EC-A

7.4.3 Applicability Provisions and Applicable Regulations

a. Glass Melting Furnace #2 as described in Conditions 7.4.1 and 7.4.2 is an "affected glass melting furnace" for the purpose of these unit-specific conditions.

b. The affected glass melting furnace is subject to the emission limits identified in Condition 5.2.2.

c. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from the affected glass melting furnace [35 IAC 218.301]. If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

d. The affected glass melting furnace #2 is subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See also Attachment 2) [35 IAC 212.321(a)].

e. The affected glass melting furnace is subject to the New Source Performance Standard (NSPS) governing PM emissions for Glass Furnaces, 40 CFR 60 Subparts A and CC, because it was constructed after June 15, 1979. The Illinois EPA is administering the NSPS in Illinois under a delegation agreement. Pursuant to 40 CFR 60.292(a)(1), on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator of a glass melting furnace subject to the provisions of 40 CFR 60 Subpart CC shall cause to be discharged into the atmosphere from any glass melting furnace fired exclusively with either a gaseous fuel or a liquid fuel, particulate matter at emission rates exceeding 0.225 g of particulate/kg of flat glass produced (those specified in Table CC-1, Column 2 and Column 3, respectively).

f. The Permittee shall not cause or allow the emission of SO_2 into the atmosphere from the affected glass melting furnace to exceed 2000 ppm [35 IAC 214.301].

7.4.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected glass melting furnace not being subject to 40 CFR 61 Subpart N-National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants, because it applies to glass melting furnaces that use commercial arsenic as a raw material.

7.4.5 Operational and Production Limits and Work Practices

a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected glass melting furnace including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to

the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

b. Pursuant to 40 CFR 60.292(e), during routine maintenance of add-on pollution controls, an owner or operator of a glass melting furnace subject to the provisions of Condition 7.4.3(e) [see also 40 CFR 60.292(a)] is exempt from the provisions of Condition 7.4.3(e) [see also 40 CFR 60.292(a)] if:

i. Routine maintenance in each calendar year does not exceed 6 days [40 CFR 60.292(e)(1)];

ii. Routine maintenance is conducted in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 60.292(e)(2)]; and

iii. A report is submitted to the Illinois EPA or USEPA 10 days before the start of the routine maintenance (if 10 days cannot be provided, the report must be submitted as soon as practicable) and the report contains an explanation of the schedule of maintenance [40 CFR 60.292(e)(3)].

c. The affected glass melting furnace uses natural gas as its primary fuel. However, the affected furnace may be fueled by #2 fuel oil or by propane.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected glass melting furnace is subject to the following:

a. Emissions of the glass furnace (Line #2) shall not exceed 12.25 lbs. of NO_x and 0.896 lbs. of SO_2 per ton of glass produced by the furnace. Compliance with these limits shall be determined by testing in accordance with the requirements in Condition 7.4.7 at the maximum operating range of the furnace [T1].

b. The above condition represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act.

c. The emissions of the new glass furnace (Line #2) shall not exceed the following limits, which are to be determined on a block 24-hour averaging basis:

Pollutant	(lb/Hour)	(Ton/Yr)
NO_x	385	1,687
SO_2	28	122.6
PM	7.2	31.5
CO	10	44.0

d. The potential increases from the new glass furnace to the old glass furnace are shown in the table below:

	Actual Emissions Before Project (Old Furnace)*	Potential Emissions After Project (New Furnace)**	Net Change
NO_x	134.0	1687	1553
SO_2	32.2	122.6	90.4
PM	16.8	31.5	14.7
CO	7.7	44.0	36.3

* Old furnace emissions reflect the lesser of average actual emissions based on stack test or AP-42 emission factor.

The old furnace emissions are evaluated based on the rate at which this furnace actually emitted during a representative two year period which is calendar year 1989 and 1990 prior to shutdown.

The contemporaneous emissions change at the source shows net emissions decrease for particulate matter from pyrolytic coating process. There is no change in NO_x and SO_2 during this contemporaneous time frame.

** New furnace emissions reflect emissions of NO_x and SO_2 based on BACT limits.

e. The above limitations were established in Permit 94060097, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not cause or contribute to air pollution in violation of the National Ambient Air Quality Standard (NAAQS) for nitrogen oxides and sulfur dioxide pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

f. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.4.7 Testing Requirements

a. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in Conditions 7.4.7(a), 7.4.7(b), and 7.4.12(a) (see also 40 CFR 60.296), except as provided in 40 CFR 60.8(b) [40 CFR 60.296(c)].

b. Pursuant to 40 CFR 60.296(d), the owner or operator shall determine compliance with the particulate matter standards in Condition 7.4.3(e) (see also 40 CFR 60.292) and 40 CFR 60.293 as follows:

i. Method 5 shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). The probe and filter holder heating system may be set to provide a gas temperature no greater than 177 ± 14°C (350 ± 25°F), except under the conditions specified in 40 CFR 60.293(e) [40 CFR 60.296(d)(2)].

ii. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity [40 CFR 60.296(d)(4)].

c. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:

i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].

iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA

within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

d. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.4.3(b).

e. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, emission measurements shall be conducted as follows, so as to demonstrate compliance with the emission limits in Condition 7.4.6:

i. Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C, or by measurement procedures established pursuant to 40 CFR 60.8(b) [35 IAC 214.101(a)].

ii. Carbon Monoxide concentrations in an effluent stream shall be measured by the non-dispersive infrared method or by other methods approved by the Illinois EPA according to the provisions of 35 IAC Part 201 [35 IAC 216.101].

iii. Measurement of nitrogen oxides shall be according to the phenol disulfonic acid method as published in 36 Fed. Reg. 15, 718, Method 7 [35 IAC 217.101].

7.4.8 Monitoring Requirements

Pursuant to Section 39.5(7)(d) of the Act and PSD Construction Permit 94060097, the Permittee shall comply with the following requirements with respect to monitoring:

a. The Permittee shall install, operate, calibrate and maintain, a continuous monitoring system for the measurement of the opacity of emission discharged into the atmosphere from the affected glass melting furnace.

b. The Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system to

measure NO_x and SO_2 emissions discharged into the atmosphere from the affected glass melting furnace.

c. These monitors shall be installed to satisfy the applicable performance specifications in 40 CFR 60, Appendix B.

d. These monitors shall determine emission in lbs/hour, as a block 24-hour average.

e. The Permittee shall install and operate meters to measure and record fuel consumption by the glass furnace.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records for the affected glass melting furnace~~s~~ to demonstrate compliance with Conditions 5.5.1, 7.4.3, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:

i. The date, place and time of sampling or measurements;

ii. The date(s) analyses were performed;

iii. The company or entity that performed the analyses;

iv. The analytical techniques or methods used;

v. The results of such analyses; and

vi. The operating conditions as existing at the time of sampling or measurement.

b. Records addressing use of good operating practices for the dry scrubber, lime injection, and electrostatic precipitator:

i. Records for periodic inspection of the dry scrubber, lime injection, and electrostatic precipitator with date, individual performing the inspection, and nature of inspection; and

ii. Records for prompt repair of defects, with identification and description of defect,

effect on emissions, date identified, date repaired, and nature of repair.

c. Records of glass production for the affected glass melting furnace, (tons/day, tons/mo, and tons/yr);

d. The Permittee shall maintain a log or file of all measurements, including continuous monitoring systems performance evaluations; all continuous monitoring systems performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection.

e. Records of hourly (block 24-hour average) and annual aggregate NO_x and SO_2 emissions from the affected glass melting furnace shall be maintained, based on measurement of emissions using the CEMS;

f. Records of monthly and annual aggregate CO, PM, and VOM emissions from the affected glass melting furnace process shall be maintained, based on glass production, fuel usage and the applicable emission factors, with supporting calculations; and

g. The Permittee shall maintain records of excess emissions due to malfunctions or breakdowns. At a minimum, these records shall include:

i. Date and duration of malfunction or breakdown;

ii. A full and detailed explanation of the cause for such emissions;

iii. The contaminants emitted and an estimate of the quantity of emissions;

iv. The measures used to reduce the quantity of emissions and the duration of the occurrence; and

v. The steps taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected glass melting furnace with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports

shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Pursuant to 40 CFR 60.7(c), each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see 40 CFR 60.7(d)) to the Illinois EPA or USEAP semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Illinois EPA or USEPA, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

   i. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period [40 CFR 60.7(c)(1)].

   ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected glass melting furnace. The nature and cause of any malfunction, breakdown, or hot hold (if known) and the corrective action taken or preventative measures adopted [40 CFR 60.7(c)(2)].

   iii. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments [40 CFR 60.7(c)(3)].

   iv. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report [40 CFR 60.7(c)(4)].

b. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test

methods from Condition 7.4.7(c) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].

c. Emissions of CO, NO_x, PM, SO_2, and/or VOM from the affected glass melting furnace in excess of the limits specified in Condition 7.4.6 within 30 days of such an occurrence.

d. Continued operation of the affected glass melting furnace with a defect in the dry scrubber, lime injection, or the electrostatic precipitator that may result in emissions of particulate matter in excess of limits in Conditions 7.4.3(b), (d), or (e) within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected glass melting furnace without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The affected glass melting furnace shall be fired with natural gas, fuel oil, or propane as the fuel.

7.4.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

a. Pursuant to 40 CFR 60.296(d), the owner or operator shall determine compliance with the particulate matter standards in Condition 7.4.3(e) (see also 40 CFR 60.292) and 40 CFR 60.293 as follows:

i. Pursuant to 40 CFR 60.296(d)(1), the emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (c_s Q_{sd} - A)/P$$

where:

E = emission rate of particulate matter, g/kg.

c_s = concentration of particulate matter, g/dsm.

Q_{sd} =volumetric flow rate, dscm/hr.

A = zero production rate correction

= 454 g/hr for pressed and blown (borosilicate) glass, wool fiberglass, and flat glass.

P = glass production rate, kg/hr.

ii. Direct measurement or material balance using good engineering practice shall be used to determine the amount of glass pulled during the performance test. The rate of glass produced is defined as the weight of glass pulled from the affected facility during the performance test divided by the number of hours taken to perform the performance test [40 CFR 60.296(d)(3)].

b. To determine compliance with Conditions 5.5.1 and 7.4.6, PM emissions from the affected glass melting furnace shall be calculated based on the following:

PM (Ton) = (Glass Production, Ton) x (E, g/kg) x (1 kg/2.205 lb) x (2.205 x 10^{-3} lb/1 g) x (2,000 lb/Ton) x (1 Ton/2,000 lb)

c. To determine compliance with Conditions 5.5.1 and 7.4.6, emissions of CO and VOM shall be calculated based on the following:

Pollutant	Glass Manufacturing Emission Factor (lb/ton)
CO	0.1
VOM	0.1

These are the emission factors for CO and VOM for glass manufacturing, melting furnace flat glass with electrostatic precipitator, Tables 11.15-1, and 11.15-2, AP-42, Volume I, Fifth Edition, Supplement D, March 1998.

Glass Manufacturing Emissions (lb) = (Glass Production, ton) x (The appropriate emission factor, lb/ton) x (1 ton/2000 lb)

d. To determine compliance with Conditions 5.5.1 and 7.4.6, emissions of NO_x and SO_2 shall be obtained from CEMS data.

7.5 Units 05: Surface Treatment, Interleaving, and Coating Operations Control: Condenser, Oxidizer, Ammonia Injection, Baghouses, and Surface Treatment Vents

7.5.1 Description

Molten glass exits the glass furnaces and flows onto the surface of the molten tin float bath. Electric heating elements control temperatures within the bath where a nitrogen atmosphere is maintained to prevent the tin from oxidation. There are virtually no air pollutant emissions.

Rollers at the bath exit lift the floating ribbon of glass into the annealing lehrs for cooling and annealing. SO_2 gas is applied as a surface treatment to the bottom of the molten glass to prevent bottom surface marking of the glass as it contacts the lift-out rollers. A ventilation system for exhausting SO_2 emissions through vents was installed in 1987 (for Line #1) and 1988 (for Line #2).

As the glass ribbon exits the annealing lehrs, an aqueous solution of interleaving material is sprayed on the top surface of the glass to separate panes when stacked. The particulate from overspray is collected by wet scrubbers. Under normal conditions, the glass overspray from each interleaving unit is routed to a packed-bed scrubber. About once a month, however, each scrubber must be shut down for a few hours of cleaning and maintenance to prevent clogging while glass production continues.

In addition, there are two coating lines which provide coating application through pyrolytic and vacuum deposition. Both coating lines produce low-emissivity glass products. For the vacuum deposition process, the cut lites are routed to an off-line coater, where a metallic coating is applied; there are virtually no emissions from this process. The pyrolytic coating process is applied on-line as part of the continuous flat glass making. Pyrolytic coating emission source and air pollution control equipment consists of a top coater with condenser, a cyclone separator, mist eliminator, ammonia injector, baghouse with dust collectors, gradient coater with thermal oxidizer, and material storage tanks with a static scrubber.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-45	Pyrolytic Coater (Top Coat Spray)	Condenser ES 45-EC-A, Cyclone ES 45-EC-B, Mist Eliminator ES 45-EC-C, Ammonia Injection ES 45-EC-D, and Baghouse ES 45-EC-e
ES-46	Pyrolytic Coater (Bottom/Gradient Coat Spray)	Oxidizer ES 46-EC-A, Ammonia Injection ES 46-EC-B, Baghouse ES 46-EC-C
ES-52	Hot End 1/Surface Treatment (Line 1 Surface Treatment)	None
ES-57	Hot End 2/Surface Treatment (Line 2 Surface Treatment)	None
ES-61	Line 1 Glass Interleaving Application	Scrubber ES 61-EC
ES-62	Line 2 Glass Interleaving Application	Scrubber ES 62-EC

7.5.3 Applicability Provisions and Applicable Regulations

a. The surface treatment, interleaving, and coating operations listed in Condition 7.5.2 and described in Condition 7.5.1 are "affected glass coating lines".

b. Each affected glass coating line is subject to the emission limits identified in Condition 5.2.2.

c. The owner or operator shall not cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any affected coating lines and surface treatment. If no odor nuisance exists this limitation shall apply only to photochemically reactive material [35 IAC 215.301].

d. Emissions of organic material in excess of those stated in Condition 7.5.3(b) above are allowable if such emissions are controlled by any air pollution control equipment approved by the Illinois EPA capable of reducing by 85% or more the uncontrolled organic material that would be otherwise emitted to the atmosphere [35 IAC 215.302(c)].

e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm [35 IAC 214.301].

f. The affected glass coating lines are subject to 35 IAC 212.321(a), which provides that:

> No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See also Attachment 2) [35 IAC 212.321(a)].

7.5.4 Non-Applicability of Regulations

The affected glass coating lines are not subject to 35 IAC Part 215, Subpart F: Coating Operations, because there is no specific limitation under 35 IAC 215.204 for the type of coating performed on the affected glass coating lines.

7.5.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the condenser, oxidizer, ammonia injector, baghouses, scrubbers, and surface treatment vents, including periodic inspection, routine maintenance and prompt repair of defects.

7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected glass coating lines are subject to the following:

a. i. Emissions of SO_2 from the SO_2 Vent on Line #1 shall not exceed 34.2 tons/yr. These limits are based on the maximum emission rate (17.7 lbs/hr) and the maximum hours of operation (8760 hr/yr).

ii. The above limitations were established in Permit 87030082, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. i. Emissions from the coating process (combination of top coater and gradient coater) shall not exceed the amounts specified in the table below:

	(lbs/hr)	(tons/yr)
Total Fluorides	2.5	5.0
Methylisobutylketone (MIBK)	3.3	6.6
Butene	6.7	13.4
Ammonia	21.2	42.4
Particulate Matter	2.5	5.0
Antimony	0.1	0.2

These emission limits are based on the Permittee's estimate of maximum emissions and maximum hours of operation (4000 hrs/yr).

ii. The above limitations were established in Permit 88020043, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. i. Emissions and operation of equipment shall not exceed the following limits:

Item of Equipment	Operating Hours (Hr/Yr)	Sulfur Dioxide (SO_2) Emissions (Lb/Hr)	(Ton/Yr)
Line 2 SO_2 Application	8,736	17.7	34.1

ii. The above limitations were established in Permit 88060041, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the

current month plus the preceding 11 months (running 12 month total).

7.5.7 Testing Requirements

a. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:

i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].

ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].

iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.5.3(b).

c. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, emission measurements shall be conducted as follows, so as to demonstrate compliance with the emission limits in Condition 7.4.6:

i. Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C, or by measurement procedures established pursuant to 40 CFR 60.8(b) [35 IAC 214.101(a)].

ii. Volatile organic material or organic material concentrations in a stream is measured by Method 18, 40 CFR 60, Appendix A, Measurement of Gaseous Organic Compounds except as follows. ASTM D-4457 may be used for halogenated organic compounds. Method 25, 25A or 25B, 40 CFR 60, Appendix A may be substituted for Method 18 provided the source owner or operator submits calibration data and other proof that this method provides the information in the emission units of the applicable standard. The volumetric flow rate and gas velocity is determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3 and 4, 40 CFR Part 60, Appendix A. Any other alternate test method must be approved by the Illinois EPA, which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative.

iii. Measurement of Fluorides. Measurement of fluoride emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, Appendix A, Method 13B or by measurement procedures established pursuant to 40 CFR 60.8(b).

iv. Chemical specification of the particulate matter to identify organotin fraction of the emissions shall be determined by using an approved USEPA analytical method.

7.5.8 Monitoring Requirements

The maximum exit gas temperature from the condenser, except during specific evaluation of control system performance, shall be maintained within a temperature range which is demonstrated to be consistent with good air pollution control practice for minimizing emissions and acceptable material recovery.

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected glass coating lines to demonstrate compliance with Conditions 5.5.1, 7.5.3, and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:

   i. The date, place and time of sampling or measurements;

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or methods used;

   v. The results of such analyses; and

   vi. The operating conditions as existing at the time of sampling or measurement.

b. Records addressing use of good operating practices for the condenser, oxidizer, ammonia injector, baghouses, scrubbers, and surface treatment vents:

   i. Records for periodic inspection of the condenser, oxidizer, ammonia injector, baghouses, scrubbers, and surface treatment vents with date, individual performing the inspection, and nature of inspection; and

   ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair;

c. The operating schedule of the affected coating lines; and

d. Monthly and aggregate annual emissions of PM, SO_2, VOM, and HAPs from the affected coating lines based on the coating usage, the VOM content of such materials, the operating schedule and the typical hourly emission rate, with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected glass coating as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such exceedances or deviations and identify corrective actions or preventive measures taken.

a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.5.7(a) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].

b. Emissions of PM, SO_2, VOM and/or HAPs from the affected glass coating lines in excess of the limits specified in Condition 7.5.6 within 30 days of such an occurrence.

c. Continued operation of the affected glass coating lines with a defect in the condenser, oxidizer, ammonia injector, baghouses, scrubbers, and surface treatment vents that may result in emissions of particulate matter in excess of limits in Conditions 7.5.3(b), (d), (e), or (f) within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected glass coating lines without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

The hourly emission limits in Condition 7.5.6(b) may be exceeded for development tests for no more than seven days in any three month period so long as the applicable regulations in Condition 7.5.3 and the annual emission limits in Condition 7.5.6(b) are never exceeded.

7.5.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

a. Compliance with Conditions 7.5.3(b) and (c) is assumed by proper operation of the condenser, cyclone separator, mist eliminator, ammonia injector, baghouses, thermal oxidizer, and scrubber, as addressed by Conditions 7.5.5 and 7.5.9(b).

b. To determine compliance with Condition 5.5.1, PM_{10} and VOM emissions from the affected coating glass lines shall be calculated based on the following:

i. Volatile Organic Material and Hazardous Air Pollutant Emissions:

	Source Emission Factor[a] (lbs/hr)
Total Fluorides	0.0353
Methylisobutylketone (MIBK)	0.789
Butene	0.659
Ammonia	15.0
Particulate Matter	0.0873
Antimony	0.1

[a] Source test results June 24, 1999.

Pyrolytic Coating Emissions (lb) = (Operating Hours, hr) x (The Appropriate Emission Factor, lb/hr)

ii. Sulfur Dioxide Emissions:

For simplification, at the discretion of the Permittee, worst case surface treatment SO_2 emissions can be estimated as:

SO_2 (lb) = (Wt. of SO_2 Used, lb)

Otherwise SO_2 emissions will be calculated based on the following emission factors established by the December, 1999 emission testing:

Stack Test Process Conditions (cu ft/hr)	For Calculation Flows	SO_2 Emission Rate (lb/hr)
60	0-60	5.57
80	60-80	7.85
100	80-100	9.09

Surface Passivation Emissions (lb) = $\sum$(Operating Time, hr) x (The Appropriate Emission Factor, lb/hr)

7.6 Unit 06: Boilers
Control: None

7.6.1 Description

Four plant boilers were constructed in January 1980 to provide plant heat and hot water for this source. Three boilers built by Orr-Semblower are rated at a maximum of 8.4 mmBtu/hr, the fourth built by Kawanee is rated at 11.7 mmBtu/hr when fired by natural gas. Each of the boilers may operate on either natural gas (normally used) or distillate fuel oil.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-25	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	None
ES-26	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	None
ES-27	Plant Boiler (Orr-Sembower) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 8.4 mmBtu/hr)	None
ES-28	Plant Boiler (Kawanee) (Natural Gas-Fired with No. 2 Fuel Oil Backup, 11.7 mmBtu/hr)	None

7.6.3 Applicability Provisions and Applicable Regulations

a. An “affected boiler” for the purpose of these unit specific conditions is a boiler listed in Condition 7.6.2 and described in Condition 7.6.1.

b. Each affected boiler is subject to the emission limits identified in Condition 5.2.2.

c. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lb/mmBtu) [35 IAC 212.206].

d. No person shall cause or allow the emission of sulfur dioxide in any one hour period from any new fuel combustion emission unit with actual heat input smaller than, or equal to 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when

distillate fuel oil is burned (0.3 lb/mmBtu) [35 IAC 214.122(b)].

e. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.6.4 Non-Applicability of Regulations

a. The NSPS for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units for which construction, modification or reconstruction is commenced after June 9, 1989 and that have a maximum design heat input capacity of 29 MW (100 mmBtu/hr) or less, but greater than or equal to 2.9 MW (10 mmBtu/hr). Boiler ES-28 was constructed prior to 1989, therefore, these rules do not apply.

b. The affected boilers are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of is less than 73.2 MW (250 mmBtu/hr).

c. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, Use Of Organic Material.

d. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.6.5 Operational and Production Limits and Work Practices

a. The affected boilers shall only be fired with natural gas and distillate fuel oil.

b. The Permittee shall not utilize distillate fuel oil (Grades No. 1 and 2) in the affected boilers with a sulfur content greater than the larger of the following two values:

i. 0.28 weight percent; or

ii. The Wt percent given by the formula: Maximum Wt percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).

7.6.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boilers are subject to the following:

a. Emissions of nitrogen dioxide and carbon monoxide from Boiler #4 (ES-28) shall not exceed 10.9 and 1.0 tons/yr, respectively.

b. The above limitations were established in Permit 80100047, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.6.7 Testing Requirements

N/A

7.6.8 Monitoring Requirements

N/A

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with Conditions 5.5.1 and 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

a. Natural gas fuel usage for the affected boilers, Mft^3/mo and Mft^3/yr;

b. Distillate fuel oil usage for the affected boilers, gal/mo and gal/yr;

c. The sulfur content of the distillate fuel oil used in the affected boilers (% by Wt); and

d. Monthly and annual aggregate CO, NO_x, PM, SO_2, and VOM emissions from the affected boilers shall be maintained, based on fuel consumption and the

applicable emission factors, with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA Compliance Section of deviations of an affected boiler with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

a. Emissions of CO and/or NO_x, in excess of the limit specified in Condition 7.6.6; or

b. The use of distillate fuel oil with a sulfur content in excess of the limit specified in Condition 7.6.5(b) with the length of time this fuel was used and the effect on emissions of SO_2 within 30 days of this violation being detected.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formulas as described below:

a. Compliance with Conditions 7.6.3(c) and (e) is assumed by the work-practices inherent in operation of natural gas-fired and distillate oil-fired boilers.

b. Compliance with Condition 7.6.3(d) is demonstrated by operation of the boiler with distillate fuel oil with a sulfur content meeting the specification of Condition 7.6.5(b).

c. Compliance with the emission limits of Conditions 5.5.1 and 7.6.6 shall be based on the emission factors listed below:

i. To determine compliance with Conditions 5.5.1 and 7.6.6, emissions from the affected boilers burning natural gas shall be calculated based on the following emission factors:

Pollutant	Natural Gas Emission Factor (lb/Mft^3)
CO	84
NO_x	100
PM	7.6
SO_2	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

Boiler Emissions (lb) = (Natural Gas Consumed, Mft^3) x (The Appropriate Emission Factor, lb/Mft^3)

ii. To determine compliance with Condition 5.5.1 and 7.6.6, emissions from the affected boilers burning distillate fuel oil shall be calculated based on the following emission factors:

Pollutant	Distillate Fuel Oil Emission Factor (lb/1000 gal)
CO	5
NO_x	20
PM	2
SO_2	142 S
VOM	0.216

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-2 and 1.3-3, AP-42, Volume I, Fifth Edition, September, 1998. S indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (lb) = (Distillate Fuel Oil Consumed, gal) x (The Appropriate Emission Factor, lb/1000 gal)

7.7 Unit 07: Emergency Diesel Engines
Control: None

7.7.1 Description

Stationary internal combustion engines are used as backup emergency power when electricity goes off at the facility. These engines use diesel fuel oil (No. 2 grade).

7.7.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-58	Line 1 Emergency East Diesel Engine (1,150 kW)	None
ES-59	Line 1 Emergency West Diesel Engine (1,150 kW)	None
ES-96	Line 2 Emergency East Diesel Engine (1,150 kW)	None
ES-97	Line 2 Emergency West Diesel Engine (1,150 kW)	None
ES-352	Mobile Standby Diesel Engine (1,860 bhp)	None

7.7.3 Applicability Provisions and Applicable Regulations

a. An "affected emergency diesel engine" for the purpose of these unit specific conditions is a diesel engine listed in Condition 7.7.2 and described in Condition 7.7.1.

b. Each affected emergency diesel engine is subject to the emission limits identified in Condition 5.2.2.

c. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].

d. No person shall cause or allow the discharge of more than 8 lb/hr (3.6 kg/hr) of organic material into the atmosphere from any emission source except if no odor nuisance exists the limitation of this condition shall apply only to photochemically reactive material. [35 IAC 215.301]

7.7.4 Non-Applicability of Regulations

a. This permit is issued based on the affected emergency diesel engines not being subject to 35 IAC 212.321 or 212.322 because due to the unique nature of this process, such rules cannot reasonably be applied.

b. The affected emergency diesel engines are not subject to 35 IAC 212.324, Process Emission Units in Certain

Areas, because the source is not located in a non-attainment area for PM_{10}, as identified in 35 IAC 212.324(a)(1).

c. The affected emergency diesel engines are not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected emergency diesel engines are not by definition fuel combustion emission units.

d. The affected emergency diesel engines are not subject to 35 IAC 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected emergency diesel engines are not by definition fuel combustion emission units.

e. This permit is issued based on the affected emergency diesel engines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected diesel engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.7.5 Operational and Production Limits and Work Practices

The affected emergency diesel engines shall only be operated with distillate fuel oil as the fuel.

7.7.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected emergency diesel engines are subject to the following:

a. Emissions and operation of the emergency diesel engines ES-58, 59, 96, and 97 shall not exceed the following limits:

Item of Equipment	Operating Hours (Hour/Year)	Nitrogen Oxides Emissions (lb/mmBtu)	Nitrogen Oxides Emissions (Ton/Yr)
Four Diesel Generators (Total for Four Units)	1,000	3.71	15.4

The above limitations were established in Permit 80100047, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules

for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. Emissions and operation of the mobile standby diesel engine (ES-352) shall not exceed the following limits:

i. The mobile stand-by diesel engine shall not operate for more than 500 hours per year.

ii. Emissions from the mobile stand-by diesel engine shall not exceed the following limits:

PM Emissions		CO Emissions		NO_x Emissions		VOM Emissions		SO_2 Emissions	
(lb/Hr)	(T/Yr)	(lb/Hr)	(T/Yr)	(lb/Hr)	(T/Yr)	(lb/Hr)	(T/Yr)	(lb/Hr)	(T/Yr)
1.0	0.25	13.6	3.40	58.4	14.60	1.8	0.45	3.6	0.90

These limits are based on manufacturer's data for PM, CO, NO_x, and SO_2 and standard AP-42 emission factors for VOM.

iii. The above limitations were established in Permit 97060075, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.7.7 Testing Requirements

a. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person’s own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].

b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of

opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.5.3(b).

7.7.8 Monitoring Requirements

N/A

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emergency diesel engines to demonstrate compliance with Conditions 5.5.1 and 7.7.6, pursuant to Section 39.5(7)(b) of the Act:

a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject to 35 IAC 212 shall retain records of the tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:

   i. The date, place and time of sampling or measurements;

   ii. The date(s) analyses were performed;

   iii. The company or entity that performed the analyses;

   iv. The analytical techniques or method used;

   v. The results of such analyses; and

   vi. The operating conditions as existing at the time of sampling or measurement.

b. Distillate fuel oil usage for the affected emergency diesel engines, gal/mo and gal/yr;

c. Heat content of the distillate fuel oil used in the affected emergency diesel engines, Btu/gal;

d. Sulfur content of the distillate fuel oil used in the affected emergency diesel engines, % by wt.;

e. Records of hours of operation for of the stand-by diesel engine (hr/mo and hr/yr);

f. Monthly and annual aggregate NO_x, PM, SO_2, and VOM emissions from the affected emergency diesel engines shall be maintained, based on the type of fuel, the

fuel usage of the affected engine test cells and the applicable emission factors, with supporting calculations; and

g. Records of hourly and annual aggregate PM, CO, VOM, NO_x, and SO_2 emissions (lb/hr and tons/yr) of the stand-by diesel engine shall be maintained, based on rated capacity, hours of operation, and the applicable emission factors, with supporting calculations.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA Compliance Section of deviations of an affected emergency diesel engine with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 IAC 212.110 that will be used [35 IAC 212.110(d)].

b. The use of any fuel other than the fuels specified in Condition 7.7.5 with the length of time this fuel was used and the effect on emissions within 30 days of this violation being detected.

c. Emissions of CO, NO_x, PM, SO2, and/or VOM from the affected emergency diesel engines in excess of the limits specified in Condition 7.7.6 within 30 days of such an occurrence.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formula(s) listed below:

a. Compliance with Conditions 7.5.3(c) and (d) is assumed by the work-practices inherent in operation of distillate oil-fired engines.

b. To determine compliance with Conditions 5.5.1 and 7.7.6, emissions from emergency diesel engines ES-58, ES-59, ES-96, ES-97 and VOM emissions from the mobile standby diesel engine shall be calculated based on the following emission factors:

Pollutant	Emission Factor (Lb/hp-hr)
NO_x	0.0024
PM	0.0007
SO_2	0.00809 S
VOM	0.000705 x 0.91

These are the emission factors for Large Stationary Diesel Engines, Table 3.4-1, AP-42, Volume I, Fifth Edition, Supplement B, October 1996. S indicates that the eight % of sulfur in the distillate fuel oil should be multiplied by the value given. VOM emission factor is based on the TOC emission factor adjusted to NMOC per the reference.

Engine Emissions (lb) = (Engine Operating Hours, hr) x (Engine Rate HP) x (Load Factor) x (The Appropriate Emission Factor, lb/mmBtu)

c. To determine compliance with Conditions 5.5.1 and 7.7.6(b), PM, CO, NO_x, and SO_2 emissions from the mobile standby diesel engine shall be calculated based on the following emission factors:

Pollutant	Emission Factor (g/hp-hr)
CO	0.58
NO_x	12.60
PM	0.07
SO_2	0.57

These are the emission factors for CO, NO_x, PM, and SO_2 as supplied by the manufacturer of the mobile standby diesel engine.

Mobile Standby Diesel Engine Emissions (lb) = (Operating Hours, hr) x (Engine Load, hp) x (Load Factor) x (The Appropriate Emission Factor, g/hp-hr) x (1 lb/453.59 g)

7.8 Unit 08: Gasoline Storage Tank
Control: None

7.8.1 Description

The Permittee operates a fixed roof storage tank that stores unleaded gasoline. Permanent submerged loading must be used for this tank, minimizing turbulence and evaporation of VOM during loading.

7.8.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
ES-329	550 Gallon Gasoline Storage Tank with Submerged Loading Pipe	None

7.8.3 Applicability Provisions and Applicable Regulations

a. Gasoline Tank ES-329 is an "affected tank" for the purpose of these unit-specific conditions.

b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.8.4 Non-Applicability of Regulations of Concern

a. The affected tank is not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank was constructed prior to 1984.

b. The affected tank is not subject to the requirements of 35 IAC 215.123, Petroleum Liquid Storage Tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m^3.

c. The affected tank is not subject to the requirements of 35 IAC 215.583, Gasoline Dispensing Facilities - Storage Tank Filling Operations, pursuant to 35 IAC 215.583(b)(3), which exempts storage tanks with a capacity less than 575 gallons.

7.8.5 Operational and Production Limits and Work Practices

The affected tank shall only be used for the storage of gasoline.

7.8.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.5.1, 7.8.3, and 7.8.5, pursuant to Section 39.5(7)(b) of the Act:

a. Design information for the tank showing the presence of a permanent submerged loading pipe;

b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;

c. The throughput of the affected tank, gal/mo and gal/yr; and

d. The monthly and aggregate annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.8.3(b) (see also 35 IAC 215.122(b), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;

b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.8.3(b) (see also 35 IAC 215.122(b)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;

c. The storage of any VOL or VPL other than the material specified in Condition 7.8.5 within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tank to determine compliance with

Conditions 5.5.1 and 7.8.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

7.9 Unit 09: Line #1 Glass Furnace Rebricking
Control: Lime Injection and Electrostatic Precipitator

7.9.1 Description

The cold repair project involves rebricking of the Line #1 glass furnace, i.e., replacing worn refractor and repairing other furnace components such as the cooling and electrical systems, which are more safely repaired when the furnace is cold. The rebricking does not involve any change to production capacity or glass melting area of the furnace. The rebricking will improve efficiency and safety of the furnace and should reduce actual emissions from current levels.

7.9.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Float Glass Line #1	750 Ton/Day Glass Furnace, Fired By Natural Gas	Lime Injection and Electrostatic Precipitator

7.9.3 Applicability Provisions and Applicable Regulations

a. The affected furnace for the purpose of these unit-specific conditions is the glass furnace described in Conditions 1.1.1 and 1.1.2.

b. The affected furnace is subject to 40 CFR 60 Subpart CC, New Source Performance Standards for glass manufacturing plants. The Permittee must comply with all applicable requirements of this subpart.

c. The affected furnace, when it was built, constituted a major new source subject to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 42.21. The Permittee must comply with all applicable requirements for the affected furnace under PSD, which requirements are not relaxed by this permit.

7.9.4 Non-Applicability of Regulations of Concern

This permit is issued based upon this rebricking project not constituting a major modification in accordance with 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality (PSD), because the potential increases in emissions from the affected furnace are less than the PSD significant net emission increase thresholds. (See also Attachment A.)

7.9.5 Operational and Production Limits and Work Practices

a. Natural gas shall be the primary fuel fired in the affected furnace; backup fuels shall include propane and No. 2 fuel oil.

b. The maximum firing rate of the affected furnace shall not exceed 211 million Btu/hour.

c. The production rate of the affected furnace shall not exceed 750 tons per day.

7.9.6 Emission Limitations

a. i. Emissions of nitrogen oxides from the affected glass-melting furnace shall not exceed 411 pounds per hour. The emissions of sulfur dioxide from the affected glass-melting furnace shall not exceed 50 pounds per hour.

ii. Emissions from the affected glass-melting furnace shall not exceed 13.2 lbs. nitrogen oxides per ton of glass produced by the furnace and 1.6 pounds sulfur dioxide per ton of glass produced by the furnace when the furnace is operating at the design capacity of 750 tons per day.

iii. This condition represents the application of the Best Available Control Technology as required by Section 165 of the Clean Air Act.

b. PM/PM_{10} emissions from the affected furnace shall not exceed the limits in Attachment A Table II.

c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.9.7 Operating Requirements

General requirements of the CAAPP permit with respect to retention and availability of records and submission of reports shall apply to the recordkeeping and reporting requirements of this permit.

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected furnace to demonstrate compliance with Conditions 1.1.5 and 1.1.6:

a. Production rate (tons/day, tons/month, tons/year).

b. Fuel consumption, as determined directly from fuel meters or indirectly from operating hours of the burners and their rated capacity.

c. An operating and maintenance log for the affected furnace.

7.9.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA of noncompliance of the affected furnace with the permit requirements. Reports shall describe the deviation, the probable cause of such deviations, and any corrective actions or preventive measures taken. These deviations may be reported in the periodic report required by the NSPS or otherwise within 30 days.

b. The Permittee shall supply the Illinois EPA with the following information once the rebricking of the affected furnace is complete:

i. Startup date of the affected furnace once rebricking is complete.

ii. A detailed listing of work completed on the affected furnace during the rebricking project.

7.9.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee may operate the affected furnace following rebricking pursuant to this permit for a period of one year, during which time the Permittee shall obtain a revised CAAPP permit that addresses the rebricked furnace.

7.9.12 Compliance Procedures

To determine compliance with the emission limits in Condition 1.1.6(a), emissions from the affected furnace shall be calculated based on representative emission factors based on testing of the furnace, with consideration and adjustment, as appropriate, for actual operation of the furnace and associated control device. Based on the most recent tests as provided in the application, these emission factors are as follows:

Pollutant	Emission Factor	
NO_x	13.2	Lb/Ton
SO_2	1.6	Lb/Ton
PM/PM_{10}	0.46*	Lb/Ton

* Actual PM emissions rate. This is different from the adjusted PM emission rate pursuant to 40 CFR 60.296(d)(I) which is used to evaluate compliance with the NSPS.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after September 9, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms

without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 – Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 - Particulate Matter Emissions from Process Emission Units

10.2.1 35 IAC 212.321 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A(P)$$

Where

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which Construction of Modification Commenced On or After April 14,1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	Ton/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.2.2 35 IAC 212.322 Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972.

a. Except as further provided in 35 IAC Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14,1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = C + A(P)$$

Where:

P = Process weight rate; and,
E = Allowable emission rate; and,

i. For process weight rates up to 27.2 Mg/hr (30 Ton/hr):

	Metric	English
P	Mg /hr	Ton/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rates in excess or 27.2 Mg/hr (30 Ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	Ton/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	Ton/hr	lbs/hr
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or Ton/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Illinois EPA;
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
- Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.

2. Minor Permit Modification

- Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

    - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

    - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA; and

- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source's suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	**For Illinois EPA use only**
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information

1. Source name:		
2. Source street address:		
3. City:		4. Zip code:
5. Is the source located within city limits?		☐ Yes ☐ No
6. Township name:	7. County:	8. I.D. number:

Owner Information

9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information

19. Who is the applicant? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents		
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	☐ Yes ☐ No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	☐ Yes ☐ No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes ☐ No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes ☐ No ☐ Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
	This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature: BY: _____ AUTHORIZED SIGNATURE _____ TITLE OF SIGNATORY _____ TYPED OR PRINTED NAME OF SIGNATORY _____ / _____ / _____ DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

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I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

PPG Industries, Inc. Illinois glass manufacturing plant is located in Macon County, Mt. Zion township, about 4 miles Southeast of Decatur. The Mt. Zion facility manufactures flat glass by a continuous float process.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	Raw Material (Receiving, Storage, and Mixing)	January 1980	Baghouses
02	Cullet System (Handling, Storage, and Feeding)	January 1980	Baghouses
03	Glass Melting Furnace #1 and Refiner (Melting and Conditioning)	January 1980	Electrostatic Precipitator and Lime Injection
04	Glass Melting Furnace #2 and Refiner (Melting and Conditioning)	November 1994	Electrostatic Precipitator and Lime Injection
05	Surface Treatment, Interleaving, and Coating Operations	January 1987 July 1988 July 1989 November 1987	Vents, Ammonia Injection, Oxidizer, Condenser, Scrubbers, and Baghouses
06	Finishing Operations (Cutting, Packing, Shipping)	January 1980	Fabric Filter Vents
07	Boilers	January 1980	N/A
08	Emergency Diesel Engines	January 1980	N/A
09	Gasoline Storage Tank	January 1980	N/A
	Fugitive Emissions (Paved and Unpaved Road Dust)	N/A	N/A
	Float Glass Line #1		Lime Injection and Electrostatic Precipitator

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	141.0
Sulfur Dioxide (SO^2)	392.3
Particulate Matter (PM)	363.7
Nitrogen Oxides (NO_x)	3,544.3
HAP, not included in VOM or PM	-----
Total	4,441.3

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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